

**USABILITY, EFFECTIVENESS, AND SATISFACTION OF STUDENTS IN
USING COLLEGE OF EDUCATION AUTOMATED REVIEW (CEDAR)**

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the College of Education
Misamis University
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In Partial Fulfillment
of the Requirements for the Degree
Bachelor of Secondary Education
Major in English

by

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APPROVAL SHEET

This thesis, entitled, “**USABILITY, EFFECTIVENESS, AND SATISFACTION OF STUDENTS IN USING COLLEGE OF EDUCATION AUTOMATED REVIEW (CEDAR)**” prepared and submitted by **Maxene I. Lago, Claiza B. Metillo, and Catherine Faith C. Dura** in partial fulfillment of the requirements for the degree of **Bachelor of Secondary Education** major in **English**, has been examined and is recommended for acceptance and approval for Research Defense.

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Maxene, Claiza, Catherine Faith

DEDICATION

This study is dedicated with heartfelt gratitude to God, whose endless grace and guidance have illuminated the researchers' path and lifted their moments of uncertainty. To the researchers' families, especially their parents, whose love, sacrifices, and unwavering belief in them became the foundation of their perseverance. To the researchers' siblings and loved ones, their patience, encouragement, and faith have kept them grounded and inspired throughout this journey. This accomplishment is not for them alone, but a reflection of the constant support, strength, and love that have all been given to them, and they humbly dedicate their success to each of you.

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ABSTRACT

In today's digital era, the success of educational technologies depends on their usability, effectiveness in supporting learning, and the satisfaction they provide to students. This study assessed the usability, effectiveness, and student satisfaction with the College of Education Automated Review (CEDAR) platform. A total of 139 education students from the second to fourth years were selected using stratified sampling. This was conducted in one of the higher education institutions in Misamis Occidental. Three validated surveys were utilized: the System Usability Scale (SUS), Mayer's Cognitive Theory of Multimedia Learning, and the Student Satisfaction Survey. Data were analyzed using Mean, Standard Deviation, Pearson Product Correlation Moment Coefficient, and Simple Linear Regression. Results revealed a very high level of usability of CEDAR, and they perceived it to be very effective. Their level of satisfaction in the use of CEDAR is also very high in terms of platform, learning experience and academic support, convenience and usability, engagement and recommendation, and confidence and motivation. Their level of effectiveness in the use of CEDAR is also very effective in terms of knowledge retention, comprehension, and exam preparedness. Significant correlations were found between usability and satisfaction, as well as effectiveness and satisfaction, with exam preparedness emerging as the strongest predictor of overall satisfaction. The study concludes that the College of Education Automated Review (CEDAR) platform is a highly usable, effective, and satisfying tool that significantly supports students' learning needs. These findings highlight the importance of sustaining CEDAR's strengths while enhancing exam-related features, accessibility, and user-driven updates, ensuring that the platform continues to empower students and bridge technology with meaningful educational experiences.

Keywords: *automated review, effectiveness, exam preparedness, student satisfaction, usability.*

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Chapter 1

INTRODUCTION

Rationale of the Study

In the digital age, educational institutions continually utilize technology to enhance student learning experiences. The move towards technology-driven education has changed traditional learning methods. These methods are now more interactive, flexible, and student-focused (Bond et al., 2020). One advancement in this area is the use of automated review systems, which aim to help students prepare more effectively by providing organized and easily accessible learning resources. The College of Education Automated Review (CEDAR) serves as a digital review platform that supports students in their academic preparation and development. However, it is crucial to assess its usability, effectiveness, and user satisfaction to understand its overall success and impact on student learning outcomes.

Usability is vital for the adoption and effectiveness of digital learning platforms. Usability refers to the ease with which users can navigate and interact with a system to complete their tasks efficiently (Ardito et al., 2022). Recent studies measure an educational system's usability based on learnability (how quickly users become familiar with the system), efficiency (how effectively users finish tasks), memorability (how well users remember functions after a break), error management (how errors are handled), and user satisfaction (how enjoyable the experience is) (Al-Fraihat et al., 2020). If a learning platform is not user-friendly, students may feel frustrated, which can lead to lower engagement and reduced learning effectiveness (Rodríguez et al., 2021). Therefore, assessing CEDAR's usability is essential to ensure that students can navigate the system

and use its features effectively.

The effectiveness of an educational tool mainly depends on how it contributes to learning outcomes and knowledge retention. Research shows that interactive learning tools enhance cognitive processing and academic performance compared to traditional review methods (Mayer, 2021). Digital review platforms, such as CEDAR, need to provide organized content, adjustable learning pathways, and interactive assessments to address students' academic needs (Zawacki-Richter & Latchem, 2021). Studies indicate that adding quizzes, instant feedback, and performance tracking features improves students' understanding and self-regulated learning (Bond et al., 2020). Therefore, this study aims to determine if CEDAR effectively helps students acquire knowledge and prepare for assessments.

Student satisfaction is another important factor for determining the success of an educational platform. Students are more likely to engage with and continue using a digital tool if they find it user-friendly and helpful for their learning (Sun et al., 2022). Several factors influence satisfaction, including content relevance, system responsiveness, accessibility, and engagement levels (Chiu et al., 2021). When students feel satisfied with an educational system, they tend to be more motivated, perform better academically, and are more likely to recommend the platform to others (Al-Fraihat et al., 2020). By analyzing students' satisfaction levels with CEDAR, I can gain insights into how the platform can be improved to meet their needs.

As digital learning platforms continue to grow in higher education, it is essential to understand how students perceive and engage with CEDAR. This study aims to gather data on the usability, effectiveness, and satisfaction of students using the system, providing

valuable insights for future enhancements in educational technology (Zawacki-Richter & Latchem, 2021). By systematically analyzing these factors, this research aims to connect technological advancements with student learning needs by identifying usability issues, evaluating the system's impact on learning outcomes, and measuring overall user satisfaction. Such an evidence-based approach ensures that CEDAR is not only functional but also effective from an educational standpoint, thus improving the digital learning experience.

The primary objective of this study is to evaluate the usability, effectiveness, and satisfaction levels of students using CEDAR as a digital review platform. The study examines how well CEDAR meets students' learning needs and expectations, focusing on whether the platform is user-friendly, improves knowledge retention, and encourages engagement among students preparing for academic assessments. Additionally, the study aims to identify challenges and limitations within CEDAR, providing data-driven recommendations for system improvements to enhance its effectiveness as a student-centered digital review tool.

This study is valuable for educators, administrators, instructional designers, and policymakers involved in developing and implementing educational technology in higher education. By examining CEDAR's usability, important insights are gained into design improvements that can enhance the user experience and boost engagement. Evaluating the platform's effectiveness will contribute to the broader conversation on how digital learning tools support academic success and knowledge retention. Furthermore, assessing student satisfaction will help identify the factors that influence the long-term use and adoption of educational technology. Ultimately, the findings from this study can improve digital

learning platforms, ensuring that CEDAR and similar systems are efficient, innovative, and responsive to students' needs, thereby enhancing the quality of education in higher education.

While there is existing literature on general e-learning environments, there is a limited amount of empirical research specifically on automated digital review platforms in teacher education. Previous studies have often focused on broad learning management systems, leaving a gap in understanding how specialized tools, such as CEDAR, affect student performance and satisfaction. Additionally, much prior research has relied heavily on qualitative analysis or anecdotal reports, creating a conceptual gap as noted by Miles et al. (2014). This study addresses that gap by employing a quantitative, descriptive-correlational design with validated instruments and thorough analysis techniques, thereby providing robust, generalizable findings to the field of educational technology.

The purpose of this study is to evaluate the usability, effectiveness, and satisfaction of students in using the College of Education Automated Review (CEDAR) platform. Specifically, it seeks to determine how well the system supports students in navigating its features, enhancing knowledge retention, and preparing for examinations. By identifying the platform's strengths and areas for improvement, this study aims to provide a clearer picture of how CEDAR contributes to students' learning experiences and academic preparedness.

This study holds significance as it not only highlights how technology-driven platforms like CEDAR can transform academic preparation but also gives voice to the actual experiences of students who use them. For educators and administrators, the findings offer valuable insights into improving instructional design and ensuring that digital tools

truly meet learners' needs. For policymakers, the results provide evidence to guide decisions on adopting and investing in educational technologies that foster equity, accessibility, and quality in higher education. Most importantly, for students, this research emphasizes the importance of creating a digital learning environment that empowers, motivates, and supports them in reaching their academic goals.

Theoretical Framework

This study utilized two key theoretical frameworks: the Technology Acceptance Model (TAM) by Davis (1989) and the Cognitive Theory of Multimedia Learning (CTML) by Mayer (2005).

The Technology Acceptance Model (TAM), developed by Davis (1989), is a foundational framework that explains how users come to accept and use technology based on two key factors: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). PU refers to the belief that using a system will improve performance, while PEOU reflects the degree to which a system is seen as easy to navigate without requiring much effort. Studies have shown that PEOU often influences PU, as technologies that are simple and user-friendly are also perceived as more beneficial (Venkatesh & Davis, 2000; King & He, 2006). Widely applied in education, TAM helps explain students' willingness to adopt digital platforms, as systems that are useful and easy to use are more likely to enhance learning experiences and academic outcomes (Teo, 2011); (Venkatesh et al., 2003).

In this study, the Technology Acceptance Model (TAM) was applied to better understand how students' perceptions shaped their actual use of the CEDAR platform. The Perceived Ease of Use (PEOU) was reflected in how students experienced the system's navigation, accessibility, and efficiency, while the Perceived Usefulness (PU) was

demonstrated in the way the platform supported exam preparedness and academic performance. By connecting these perceptions with students' overall satisfaction, TAM provided a structured lens to explain why students accepted and engaged with CEDAR. More importantly, it highlighted the human side of technology use, showing that when students find a platform both easy to use and genuinely helpful to their studies, they are more motivated to rely on it as a meaningful support in their academic journey.

Recent scholarship has reinforced the applicability of the Technology Acceptance Model (TAM) in educational technology research. Nikou and Economides (2021) demonstrated that mobile-assisted assessments were more effective when learners perceived them as both useful and easy to navigate, underscoring the joint influence of PU and PEOU on sustained engagement. Almahasees et.al., (2021) further reported that during the rapid shift to online learning, students favored digital platforms that minimized effort and enhanced learning outcomes, reflecting the critical role of usability in shaping perceptions of usefulness. Likewise, Li and Tsai (2023) emphasized that personalization and interactivity in digital environments significantly improved student engagement and satisfaction. Collectively, these studies highlight the continued relevance of TAM in explaining technology acceptance, providing empirical support for its application in the present study's evaluation of the CEDAR platform.

On the other hand, the Cognitive Theory of Multimedia Learning (CTML), proposed by Mayer (2005), emphasizes that learners process information more effectively when instructional materials are designed in line with the way the human mind works. According to this theory, people learn best when both verbal (spoken or written text) and visual (images, graphics, or diagrams) channels are used together, rather than relying on

one channel alone. CTML also highlights the principle of limited capacity, meaning that learners can only process a certain amount of information at one time, making it crucial for materials to be clear and well-structured. Furthermore, the theory underscores active processing—where learners must mentally select, organize, and integrate information for meaningful learning to occur. These principles stress the importance of intentional instructional design that supports attention, reduces cognitive overload, and promotes deeper comprehension.

In this study, CTML was particularly relevant because the College of Education Automated Review (CEDAR) platform incorporates multimedia-enhanced review tools, such as interactive quizzes and text-based materials that are structured to guide students through exam preparation. By applying CTML principles, the study explored how these features helped students retain information, build comprehension, and feel more confident about their readiness for examinations. The theory guided the evaluation of whether CEDAR's learning design was aligned with cognitive principles, such as reducing overload, engaging students actively in self-testing, and reinforcing concepts through structured formats. In doing so, CTML provided a lens to assess not only how students used the platform but also how its design supported deeper and more meaningful learning experiences.

Recent studies have supported the ongoing relevance of CTML in digital learning environments. For instance, Reisslein et. al., (2022) emphasized that multimedia instruction grounded in CTML principles significantly improved student comprehension in STEM-related subjects by balancing visual and textual elements. Similarly, Dai et al., (2022) highlighted how navigation simplicity, aligned with cognitive load reduction,

enhanced student performance and lowered frustration in online platforms. More recently, Li and Tsai (2023) found that personalization and interactivity in multimedia learning systems increased student engagement and satisfaction, echoing CTML's emphasis on active processing. These contemporary studies illustrate how CTML continues to inform the design of e-learning tools, providing evidence that platforms like CEDAR can effectively support exam preparedness and overall satisfaction when grounded in cognitive principles.

Numerous studies support the relevance of both TAM and CTML in the realm of digital education. For example, research by Al-Emran et al. (2020) found that both PU and PEOU are significant predictors of students' willingness to embrace mobile learning platforms. Similarly, Nikou and Economides (2021) highlighted that PU is a major driver of student engagement in e-learning environments. Furthermore, evidence from Mayer et al. (2021) shows that students who learn through multimedia perform better in comprehension tasks compared to those who only use text. Reisslein et al. (2022) also found that multimedia elements, such as animations and narrated visuals, enhance learners' grasp of complex topics.

Integrating TAM and CTML provides a comprehensive theoretical foundation for investigating the College of Education Automated Review (CEDAR) platform. TAM facilitates the assessment of how students' perceptions of usability and usefulness influence acceptance and continued use. CTML guides the evaluation of CEDAR's learning features, such as structured review materials, practice quizzes, and formative assessments, which are designed to enhance cognitive processing, knowledge retention, and exam readiness. Collectively, these frameworks enable analysis of the impact of CEDAR's user interface

and content design on student engagement, academic performance, and overall satisfaction within a digital learning context.

Conceptual Framework

This study investigates the impact of the College of Education Automated Review (CEDAR) platform on students, focusing on usability, effectiveness, and overall satisfaction. By investigating these three areas, the research seeks to determine how CEDAR enhances student learning experiences and supports academic preparation. The study is grounded in established theories of technology acceptance and multimedia learning, enabling a comprehensive evaluation of the platform's influence on students.

Usability encompasses the ease and efficiency of the learning experience on the platform. Key factors include navigation, which enables students to locate study materials, complete assessments, and utilize features without difficulty. Accessibility ensures that all students, regardless of device or learning style, experience minimal technical barriers. System efficiency, characterized by rapid and smooth platform performance, further enhances student engagement and supports uninterrupted learning. Research demonstrates that intuitive and accessible educational platforms are more likely to be integrated into students' study routines, leading to increased engagement and improved academic performance (Venkatesh et al., 2022).

Navigation plays a central role in shaping students' interaction with the platform. Clear menus, well-structured content organization, and user-friendly layouts minimize confusion and reduce the cognitive load associated with finding materials. When students can easily locate lessons, quizzes, and other review tools, they are more likely to focus on learning rather than troubleshooting, thereby fostering a more efficient and engaging

experience.

Accessibility emphasizes inclusivity by ensuring that all learners, regardless of the type of device they use or their individual learning needs, can interact seamlessly with the platform. This involves cross-device compatibility, responsive design, and accommodations for students with different technological skills or connectivity levels. A platform that prioritizes accessibility promotes equity, allowing every learner to fully participate in the digital review process without being limited by technical constraints.

System efficiency refers to the platform's ability to deliver consistent performance, including quick load times, smooth navigation, and minimal downtime. Reliable system functionality not only prevents interruptions during study sessions but also builds trust among students who depend on the platform for exam preparation. When the system operates efficiently, learners are more likely to engage consistently, complete activities on time, and perceive the platform as a credible tool for academic support.

Effectiveness refers to the platform's impact on students' learning outcomes, including knowledge retention, conceptual understanding, and exam preparation. The Cognitive Theory of Multimedia Learning (CTML) posits that effective digital learning environments should integrate multimedia elements to deepen understanding and improve memory retention (Mayer et al., 2021). Knowledge retention refers to a student's ability to store and recall essential information over time. Comprehension assesses how effectively students understand key concepts through engaging learning experiences. Exam preparedness is critical, as digital platforms must equip students with the skills and knowledge required for success in high-stakes assessments. Studies indicate that interactive tools, such as quizzes, simulations, and instructional videos, can substantially

enhance students' retention and application of information (Reisslein et al., 2022).

Knowledge retention is one of the most vital outcomes of any digital learning platform, as it ensures that students can hold onto important concepts beyond a single lesson or review session. When platforms provide repeated exposure through review exercises and practice tests, students are more likely to remember key details when they need them most, such as during exams or in practical applications. A system that supports long-term retention not only helps learners perform better academically but also equips them with lasting knowledge they can carry into their future teaching careers.

Comprehension goes beyond memorizing facts and focuses on whether students can make sense of the material they are studying. A platform that explains concepts clearly, presents information in structured ways, and allows students to practice applying what they've learned fosters deeper understanding. When learners truly comprehend the material, they feel more confident tackling challenging questions and can connect ideas across different topics. This makes learning feel less about memorization and more about building meaningful knowledge they can apply in real-world teaching contexts.

Exam preparedness is especially significant in a college of education setting, where students face rigorous assessments like licensure exams. A platform that offers practice tests, targeted drills, and immediate feedback allows learners to simulate exam conditions and identify areas for improvement. This not only builds competence but also reduces test anxiety by giving students a sense of readiness. By strengthening their confidence and sharpening their test-taking strategies, exam preparedness tools make students feel empowered to succeed in high-stakes evaluations.

Student satisfaction is the dependent variable in this analysis, influenced by both

usability and effectiveness. When a platform is user-friendly and supports learning, students are more likely to have positive experiences and continue using the system. Satisfaction is directly linked to overall experience, engagement, and continued use of digital review platforms (Zhou & Zhang, 2023). Well-designed and effective platforms enhance student satisfaction, which in turn contributes to improved academic performance and success.

The *Platform* itself serves as the foundation of student satisfaction, as it represents the overall system where students engage with content, assessments, and features. A well-structured platform that functions smoothly and offers relevant tools creates a sense of reliability for learners. When students feel that the platform consistently supports their academic needs, their trust and satisfaction with the system naturally increase, encouraging regular use and integration into their study habits.

The *Learning Experience and Academic Support* dimension focuses on how effectively the platform assists students in mastering content and feeling supported throughout their learning journey. A system that offers review materials, clear explanations, and opportunities to reinforce understanding makes learners feel that they are not navigating their studies alone. Academic support embedded in the platform reassures students that they are receiving guidance, fostering both satisfaction and confidence in their learning progress.

Convenience and Usability refer to how easy it is for students to access and use the platform, whether through intuitive design, mobile compatibility, or simple navigation. When students can log in anytime, find resources quickly, and complete tasks without technical struggles, their overall experience becomes more seamless. This convenience

saves time and reduces frustration, allowing learners to focus their energy on studying rather than troubleshooting, which significantly contributes to satisfaction.

Engagement and Recommendation highlight the social and motivational aspects of satisfaction. Platforms that make learning interactive and engaging keep students interested, while features that encourage collaboration or active participation create a sense of community. When learners are engaged and find the system enjoyable, they are more likely to recommend it to peers, reflecting high levels of satisfaction and endorsement of the platform's value.

Confidence and Motivation capture how the platform impacts students' mindset and drive to achieve academic success. When learners feel that the platform equips them with the right knowledge and tools, they become more confident in their abilities to perform well in exams and classroom tasks. This confidence boosts their motivation to study consistently, reinforcing satisfaction because the platform not only supports their academic goals but also strengthens their belief in themselves.

The relationships between usability, effectiveness, and student satisfaction are visually represented in Figure 1. An easy-to-navigate, accessible, and efficient platform boosts student engagement. Likewise, a system that effectively aids in knowledge retention, comprehension, and exam readiness translates into improved learning outcomes. These aspects collectively enhance student satisfaction, paving the way for ongoing reliance on digital learning platforms. By exploring these dimensions, this study aims to offer valuable insights into refining CEDAR's design and functionality to support students on their academic journeys better.

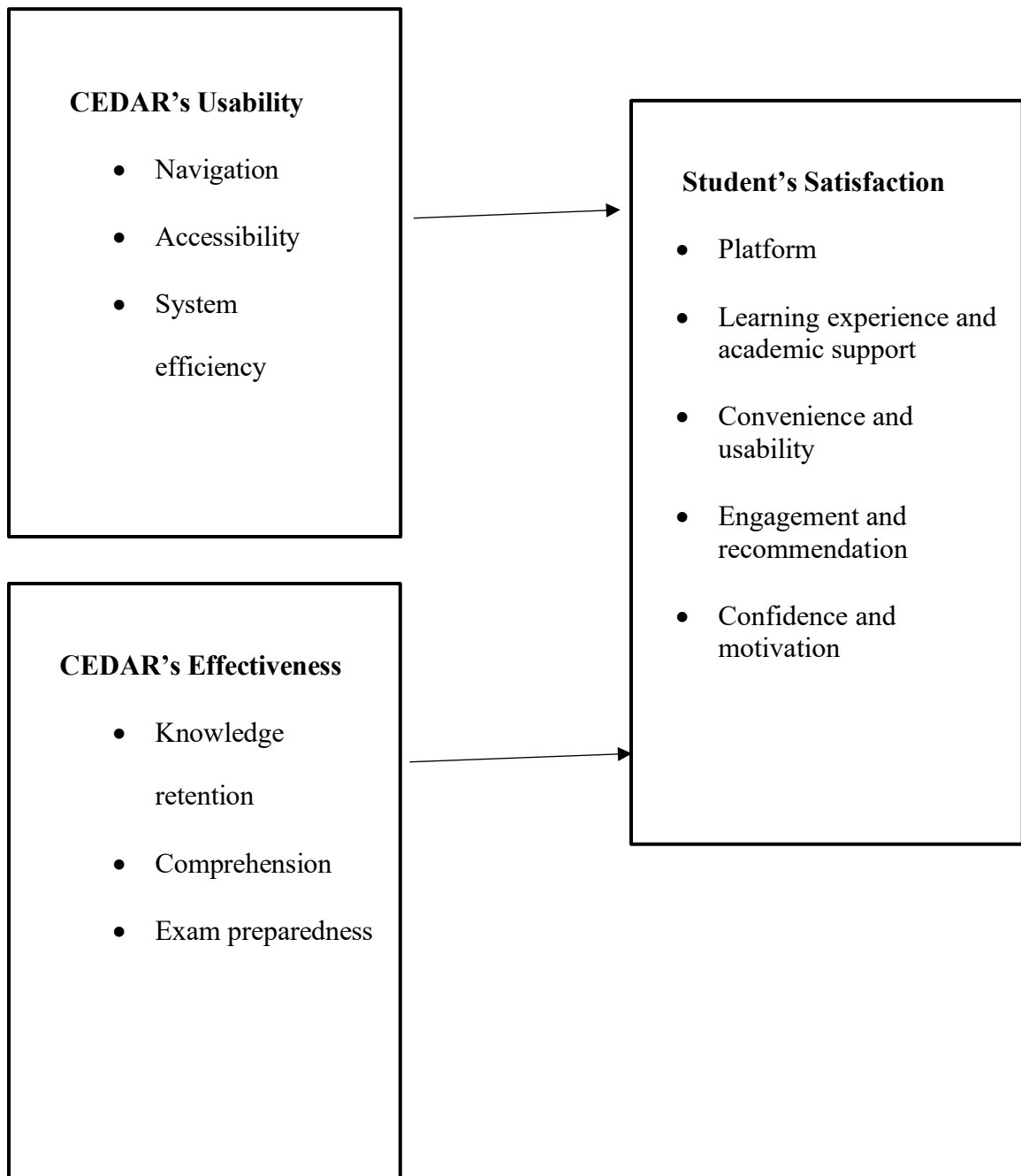


Figure 1. Schematic Diagram of the Study

Statement of the Problem

This study aimed to evaluate the user-friendliness of CEDAR, its effectiveness for students, and the level of satisfaction students experience while using it. The goal was to answer some key questions:

1. What is the level of usability of CEDAR in terms of ease of navigation, accessibility, and system efficiency?
2. What is the level of effectiveness of CEDAR in terms of knowledge retention, comprehension, and examination preparedness?
3. What is the level of satisfaction among students in using CEDAR in terms of platform, learning experience and academic support, convenience and usability, engagement and recommendation, and confidence and motivation?
4. Is there a significant relationship between the CEDAR's level of usability and the student's level of satisfaction?
5. Is there a significant relationship between CEDAR's effectiveness and the students' level of satisfaction?
6. What factors predict how satisfied students will be when using CEDAR?

Null Hypotheses

Ho₁: There is no significant relationship between the CEDAR's level of usability and the students' level of satisfaction.

Ho₂: There is no significant relationship between the CEDAR's extent of effectiveness and the students' level of satisfaction

Ho₃: There is no predictor of students' level of satisfaction in CEDAR.

Chapter 2

RESEARCH METHODOLOGY

Design

This study employed a quantitative approach with a descriptive-correlational design to examine the relationships among CEDAR's usability, effectiveness, and student satisfaction. The descriptive component assessed students' perceptions of the platform's usability and effectiveness, providing insight into their interactions with CEDAR and its impact on their learning.

On the other hand, the correlational aspect examines the relationship between these usability and effectiveness factors and student satisfaction. This provides a deeper insight into how these elements together shape the overall learning experience for students.

This design enables systematic collection of measurable data, facilitating objective analysis of students' experiences with CEDAR. The approach enables the identification of key factors that influence student satisfaction in terms of usability and effectiveness. These insights can inform enhancements to digital learning tools, increase student engagement, and support academic achievement.

Setting

This study took place at a higher education institution in Ozamiz City, Misamis Occidental, Philippines, with a specific focus on the College of Education. This college has built a strong reputation for academic excellence, known for producing successful graduates and achieving impressive results in teacher licensure exams. Committed to providing high-quality education, the college has adopted modern teaching methods and

digital tools to enhance student engagement and academic success.

To enhance students' readiness for their studies, the college introduced an automated review platform that provided students with access to a range of study materials and assessments. The goal of this research was to assess the user-friendliness and effectiveness of the platform, as well as its overall impact on student learning. The findings aim to provide valuable insights into how technology can further enhance educational experiences.

Respondents

The respondents of this study were second-year, third-year, and fourth-year students from the College of Education at a higher education institution in Ozamiz City, Misamis Occidental, Philippines. Using a stratified sampling method, a total of 139 respondents were selected to ensure fair representation across different year levels. Specifically, the sample included 32 second-year students, 50 third-year students, and 57 fourth-year students. The selection was guided by specific inclusion criteria: (1) students had to be officially enrolled in the College of Education, (2) active users of the College of Education Automated Review (CEDAR) platform, (3) willing to voluntarily participate in the study, and (4) must have completed at least one academic term using CEDAR for review purposes. This approach ensured that the respondents accurately represented the target population and provided meaningful insights into their experiences with the platform.

Instruments

The researcher adopted three validated survey instruments in this study. In addition, a pilot test was conducted on thirty (30) education students, and the results were used to assess the feasibility of the CEDAR survey questionnaire and determine its reliability through Cronbach's Alpha.

A. *Usability of the CEDAR Platform.* This instrument measured students' perceptions of the platform's usability based on key factors, including navigation, accessibility, and system efficiency. The questions are adapted from established usability evaluation frameworks, particularly the System Usability Scale (SUS) by Brooke (1996), to strengthen the instrument's construct validity. A total of fifteen (15) items are rated using a 5-point Likert scale. To ensure the reliability of the instrument, a pilot test was conducted with a sample of education students. The result yielded a Cronbach's Alpha of 0.889, indicating a high level of internal consistency and confirming that the scale is reliable for assessing usability.

Response	Continuum	Interpretation
5 – Strongly Agree	4.20 – 5.00	Very High
4 – Agree	3.40 – 4.19	High
3 – Neutral	2.60 – 3.39	Moderate
2 – Disagree	1.80 – 2.59	Low
1 – Strongly Disagree	1.00 – 1.79	Very Low

B. *Effectiveness of the CEDAR Platform.* This instrument assessed the extent to which the platform supports students' learning in terms of knowledge retention,

comprehension, and exam preparedness. The items are grounded in the principles of the Cognitive Theory of Multimedia Learning (Mayer, 2005), which emphasizes the integration of multimedia elements to enhance understanding and memory retention. A total of fifteen (15) items are evaluated using a 5-point Likert scale. A pilot test conducted to ensure reliability produced a Cronbach's Alpha of 0.877, indicating strong internal consistency.

Response	Continuum	Interpretation
5 – Strongly Agree	4.20 – 5.00	Very Effective
4 – Agree	3.40 – 4.19	High
3 – Neutral	2.60 – 3.39	Moderate
2 – Disagree	1.80 – 2.59	Low
1 – Strongly Disagree	1.00 – 1.79	Very Low

C. Student Satisfaction with the CEDAR Platform. This survey measured overall student satisfaction with the platform. It focused on ease of use, perceived learning benefits, and willingness to keep using the system. The questions in this section are taken from established student satisfaction surveys often used in e-learning research to ensure the relevance of the data. A total of fifteen (15) items will be evaluated using a 5-point Likert scale, from Strongly Disagree (1) to Strongly Agree (5). A pilot test was done to check the internal consistency of the survey. It produced a Cronbach's alpha value of 0.731, indicating good reliability for measuring student satisfaction.

Response	Continuum	Interpretation
5 – Strongly Agree	4.20 – 5.00	Very High
4 – Agree	3.40 – 4.19	High
3 – Neutral	2.60 – 3.39	Moderate
2 – Disagree	1.80 – 2.59	Low
1 – Strongly Disagree	1.00 – 1.79	Very Low

All research instruments underwent a careful validation process by a group of experts in language education. The panel evaluated the questionnaire and proficiency tests to ensure they were clear, relevant, and aligned with the study's goals. They revised any identified ambiguities, inaccuracies, or inconsistencies based on the experts' suggestions to improve the validity and reliability of the instruments. The feedback from the panel was carefully incorporated into the final revisions before the instruments were officially distributed to the respondents.

Data Gathering Procedure

In line with the research protocol, the data collection process started with the researchers formally requesting permission from the Office of the Dean of the College of Education. The researchers also obtained a letter of request from the Office of the College Dean, which was presented to the respondents in the study area. Once the necessary approvals were obtained, the research could proceed.

The study began with an orientation session. This session provided participants with information on the purpose, procedures, and ethical considerations of the research. Afterwards, the researchers gave the survey questionnaire to the selected respondents.

Participants had enough time to complete the questionnaire, which helped ensure accurate and thoughtful responses.

After collecting the data, the researchers tallied, analyzed, and interpreted the responses using the appropriate statistical methods. They used descriptive statistics to determine the levels of usability, effectiveness, and student satisfaction. They also conducted a correlational analysis to examine the relationships among these variables. The findings were interpreted systematically to provide meaningful insights that helped understand the impact of CEDAR on students' learning experiences.

Ethical Considerations

Ensuring ethical research practices is crucial, especially when obtaining consent and permission from all respondents and participants involved in data collection. Formal request letters will be sent to inform and prepare participants about their roles in the study. The confidentiality of respondents acting as informants was strictly maintained. Their identities were protected and not disclosed publicly. Protecting privacy and respecting the dignity of all participants will be the top priority. Additionally, the study's objectives and purpose were clearly presented without exaggeration or misrepresentation.

After addressing all ethical considerations, the researcher moved forward with data collection using survey questionnaires. Once the completed questionnaires were gathered, the data will be carefully transcribed into a spreadsheet to ensure accuracy and organization. This method ensures strict compliance with ethical research guidelines.

Data Analysis

The researchers employed the appropriate statistical tools to analyze the collected

data.

Mean was used to determine the average responses of students regarding the usability, effectiveness, and satisfaction with the CEDAR platform, providing a general overview of their perceptions.

Standard Deviation was utilized to measure the variability in students' responses, indicating the consistency or diversity of their experiences with the platform.

Pearson Product-Moment Correlation Coefficient was applied to examine the strength and direction of the relationships among usability, effectiveness, and student satisfaction, identifying whether these relationships were positive or negative.

RESULTS AND DISCUSSION

Level of Usability of CEDAR

Table 1 presents the respondents' ratings of the CEDAR platform's usability in terms of navigation, accessibility, and system efficiency. The results reveal that all three areas received a "Very High" rating: Ease of Navigation ($M = 4.24$, $SD = 0.33$), Accessibility ($M = 4.37$, $SD = 0.38$), and System Efficiency ($M = 4.42$, $SD = 0.41$). The overall mean usability score was 4.34 ($SD = 0.37$), which also falls into the "Very High" category based on the provided scale (4.20–5.00).

These findings suggest that students see the CEDAR platform as very usable across all assessed areas. System Efficiency received the highest mean score, showing that the platform is reliable, loads quickly, and has few errors. Accessibility was closely followed, indicating good compatibility across devices and features that support various learning needs. Ease of Navigation also received a very high rating, confirming the platform's intuitive design and user-friendly layout. The relatively low standard deviation values indicate that students have consistent experiences and satisfaction with the platform's usability features.

The findings align with recent research emphasizing the importance of usability in e-learning platforms. Almahasees et al., (2021) found that ease of use, quick system responses, and cross-device functionality greatly affect students' motivation and satisfaction. Platforms that meet these needs are more likely to be used effectively by students, especially in blended and online learning environments. This supports the high

ratings given to CEDAR's accessibility and system efficiency in this study.

Similarly, Dai et al., (2022) emphasized the importance of simple navigation and good interface design for reducing cognitive load and improving comprehension. Their study concluded that user-friendly platforms enable students to focus more on learning rather than navigating the system. This supports the current findings, which indicate that CEDAR's ease of navigation was rated very high, demonstrating that students can concentrate on their studies without being hindered by usability problems.

The high usability ratings for the CEDAR platform have important implications for educational institutions and platform developers. They highlight the importance of a user-centered design that prioritizes accessibility, efficiency, and easy navigation. Continued improvements in these areas can further enhance students' digital learning experiences and outcomes. Additionally, the findings suggest that platforms like CEDAR play a crucial role in developing independent, confident, and motivated learners, making them an important part of modern educational systems.

Table 1

Level of Usability of CEDAR

	Mean	SD	Remarks
Ease of Navigation	4.24	0.33	Very High
Accessibility	4.37	0.38	Very High
System Efficiency	4.42	0.41	Very High
Overall level of Usability	4.34	0.37	Very High

Scale: 4.20-5.0 (Very High); 3.40-4.19(Moderately High); 2.60-3.39 (High); 1.80-2.59(Low); 1.0-1.79 (Very Low)

Level of Effectiveness of CEDAR

Table 2 presents the students' evaluation of the CEDAR platform's effectiveness in promoting knowledge retention, comprehension, and exam preparation. The results

indicate that all three areas received a "Very Effective" rating: Knowledge Retention ($M = 4.47$, $SD = 0.33$), Comprehension ($M = 4.43$, $SD = 0.38$), and Exam Preparedness ($M = 4.46$, $SD = 0.42$). The overall effectiveness rating was 4.53 ($SD = 0.42$), which also falls under the "Very Effective" category based on the provided scale (4.20-5.00).

These findings show that students consider CEDAR highly effective in supporting their academic development. Among the three areas, Knowledge Retention received the highest mean score, indicating that the platform effectively helps students retain key concepts over the long term. Exam Preparedness and Comprehension followed closely behind, suggesting that students feel more capable of understanding course material and doing well on exams after using the platform. The low standard deviation values in all areas reflect consistent positive experiences among students.

Recent studies support these findings, highlighting the growing role of digital platforms in improving student learning outcomes. For example, Zainuddin et al., (2021) found that e-learning tools with interactive content and personalized feedback significantly improve students' knowledge retention and understanding. Their study noted that platforms with practice tests, review sessions, and adaptive learning strategies help boost academic performance. These results align with the current study, particularly in terms of the high ratings for knowledge retention and exam preparedness.

In another study, Gomez et al., (2023) examined the effectiveness of online learning platforms in preparing students for summative assessments. The research concluded that platforms featuring multimedia materials, formative assessments, and progress tracking significantly increased student confidence and comprehension. This aligns with students' views of CEDAR as "Very Effective" in helping them prepare for exams and grasp

complex concepts. These findings confirm that CEDAR includes features that assist cognitive development and academic readiness.

The high effectiveness ratings suggest that CEDAR is a valuable academic tool that can significantly contribute to students' learning processes. For educators and institutions, this highlights the need to adopt and invest in digital platforms that focus on retention strategies, comprehension aids, and exam preparation. Additionally, the positive results suggest that CEDAR could serve as a model for future digital learning innovations, fostering more effective and student-centered educational environments.

Table 2

Level of Effectiveness of CEDAR for Students

	Mean	SD	Remarks
Knowledge Retention	4.47	0.33	Very Effective
Comprehension	4.43	0.38	Very Effective
Exam preparedness	4.46	0.42	Very Effective
Overall effectiveness	4.53	0.42	Very Effective

Scale: 4.20-5.0 (Very Effective); 3.40-4.19 (Moderately Effective); 2.60-3.39 (Effective); 1.80-2.59 (Less Effective); 1.0-1.79 (Least Effective)

Level of Satisfaction Among Students in Using CEDAR

Table 3 presents students' satisfaction with the CEDAR platform across five key areas: learning experience and academic support, convenience and usability, engagement and recommendation, confidence, and motivation. All areas received "Very High" satisfaction ratings. Confidence and motivation had the highest mean score ($M = 4.60$, $SD = 0.491$). Learning experience and academic support were rated as the most important aspects ($M = 4.58$, $SD = 0.328$), followed by engagement and recommendation ($M = 4.51$, $SD = 0.337$), and convenience and usability ($M = 4.47$, $SD = 0.379$). Overall satisfaction was also very high, with a mean of 4.34 ($SD = 0.38$).

The data suggest that students are very satisfied with the CEDAR platform in several areas of their learning experience. The highest rating for confidence and motivation shows that CEDAR builds a strong sense of self-efficacy and enthusiasm for academic tasks. Likewise, high scores in learning experience and academic support indicate that the platform effectively delivers quality educational content and scaffolding. The consistently high means and relatively low standard deviations suggest that satisfaction is widespread among respondents, demonstrating that the platform meets the diverse needs of learners.

Recent research highlights the importance of student satisfaction in technology-enhanced environments. For example, Tawafak et al. (2021) state that student satisfaction in digital learning platforms is strongly affected by system interactivity, usability, and motivational design. Their findings show that platforms with clear guidance, responsive design, and interactive elements boost student motivation and overall satisfaction. This reflects the high ratings in CEDAR's confidence, motivation, and usability.

Additionally, Li and Tsai (2023) looked at student engagement and satisfaction in digital learning platforms. They found that personalized feedback, mobile accessibility, and peer-sharing features significantly increased students' engagement and willingness to recommend platforms to others. These findings closely match CEDAR's high scores in engagement and recommendation, suggesting that the platform's features align with best practices in modern educational technology.

The high satisfaction levels across all measured areas indicate that the CEDAR platform is not only functional but also greatly influences students' learning attitudes and behaviors. Educational institutions should consider integrating or continuing to use CEDAR as a key tool for academic support. Furthermore, the findings highlight the

importance of maintaining student-centered design principles in e-learning platforms to sustain motivation, boost confidence, and promote self-directed learning. The positive feedback also sets a standard for future improvements and expansions of similar digital platforms.

Table 3

Level of Satisfaction Among Students in Using CEDAR

	Mean	SD	Remarks
Learning experience & Academic support	4.58	0.328	Very High
Convenience & Usability	4.47	0.379	Very High
Engagement & Recommendation	4.51	0.337	Very High
Confidence & motivation	4.60	0.491	Very High
Overall level of Satisfaction	4.34	0.38	Very High

Scale: 4.20-5.0 (Very High); 3.40-4.19 (Moderately High); 2.60-3.39 (High); 1.80-2.59 (Low); 1.0-1.79 (Very Low)

Significant Relationship Between the CEDAR's Level of Usability and the Student's Level of Satisfaction

Table 4 shows the correlation coefficients (r) and significance levels (p) between the CEDAR platform's usability components, including ease of navigation, accessibility, and system efficiency, and different aspects of student satisfaction. The results reveal that system efficiency has a significant relationship with both learning experience and academic support ($r = 0.256$, $p = 0.010$) as well as a notable relationship with confidence and motivation ($r = 0.253$, $p = 0.010$). Additionally, accessibility has a positive correlation with the learning experience and academic support ($r = 0.212$, $p = 0.033$). However, other usability components, such as ease of navigation, do not show meaningful relationships with any satisfaction measures.

These findings suggest that system efficiency is the strongest predictor among

usability factors for improving students' learning experience and motivation. This highlights the need for smooth, fast, and reliable system performance to maintain high satisfaction levels. The positive link between accessibility and learning experience further indicates that students who can easily access the platform on various devices tend to have better learning experiences. Interestingly, ease of navigation did not show any significant correlations with satisfaction variables, suggesting that different factors might be more influential in shaping the overall student experience.

Research over the past five years has consistently highlighted system efficiency as a key driver of student engagement and satisfaction in digital learning environments. Gopal et al. (2021) note that system reliability and response speed significantly impact learners' trust in e-learning platforms, which influences their motivation and willingness to continue using these tools. The strong correlation found between system efficiency and both academic support and confidence in this study supports their findings, implying that students associate platform performance with educational value.

Additionally, Khan and Masrek (2022) emphasize the role of accessibility in supporting inclusive education. Their study shows that platforms focusing on responsive design and device compatibility contribute more effectively to student satisfaction and academic success. This reinforces the current study's finding that accessibility significantly enhances learning experiences. It suggests that usability is not just a technical feature but a key part of effective teaching.

The implications of these findings are clear. Institutions seeking to implement or enhance digital platforms, such as CEDAR, should prioritize system efficiency and accessibility to foster positive learning outcomes and enhance user satisfaction. While easy

navigation is important, the system's stability and accessibility across various devices seem to have a more significant effect on students' academic support experiences and motivation. Developers and educators must prioritize optimizing these essential usability features to maintain engagement and satisfaction in digital learning environments.

Table 4

Significant relationship between the CEDAR's level of usability and the student's level of satisfaction:

Variables		Platform	Learning Experience & Academic Support	Convenience & Usability	Engagement & Recommendation	Confidence & Motivation
Ease of Navigation	<i>r</i>	0.046	0.101	0.085	-0.013	0.054
	<i>p</i>	0.648	0.313	0.397	0.895	0.587
Accessibility	<i>r</i>	-0.006	0.212*	0.193	-0.039	0.119
	<i>p</i>	0.951	0.033	0.052	0.700	0.232
System Efficiency	<i>r</i>	0.125	0.256**	0.143	-0.023	0.253*
	<i>p</i>	0.211	0.010	0.153	0.818	0.010

Probability Value Scale: $p < 0.01$ (Very Highly Significant); $p < 0.01$ (Highly Significant); $p < 0.05$ (Significant)

Significant Relationship Between the CEDAR's Effectiveness and the Students' Level of Satisfaction

Table 5 shows the relationship between CEDAR's effectiveness—measured by knowledge retention, comprehension, and exam preparedness—and different areas of student satisfaction. The results indicate that exam preparedness is significantly related to the platform ($r = 0.308$, $p = .002$), as well as to confidence and motivation ($r = 0.237$, $p = .016$). In contrast, knowledge retention and comprehension do not show significant correlations with any of the satisfaction areas, as all p -values exceeded the .05 threshold.

The findings suggest that students who see CEDAR as effective for exam

preparation tend to be more satisfied with the platform and have higher confidence and motivation in their studies. However, the lack of significant relationships between knowledge retention, comprehension, and satisfaction suggests that while students value understanding concepts, their satisfaction is more closely linked to measurable outcomes, such as exam readiness. These results highlight the importance of perceived usefulness in assessing student satisfaction with digital learning platforms.

These findings support the study by Xie et al. (2021), which found that online learning platforms that prepare students for assessments significantly increase satisfaction levels. This increase is primarily due to a reduction in anxiety and an increase in perceived competence. Their research emphasizes that features aimed at outcomes, such as mock exams and test simulations, enhance learners' sense of accomplishment and reassurance, improving overall satisfaction.

Moreover, Salas-Pilco et al. (2022) noted that students tend to rate digital platforms more favorably when they believe these tools directly contribute to their academic success, such as improving test scores. This aligns with the current study's finding that exam preparedness is a key predictor of student satisfaction. However, they also noted that, while comprehension and long-term retention are important, students often undervalue these elements unless they are directly connected to performance measures, such as grades or certifications.

The strong links between exam preparedness and student satisfaction suggest that educational platforms like CEDAR should focus on features that enhance students' readiness for assessments. This could include interactive quizzes, exam simulations, and targeted review sessions. While it is essential to develop features that support

comprehension and retention for long-term learning, the immediate factor influencing satisfaction seems to be exam readiness. Developers and educators should find a balance between outcome-focused tools and foundational cognitive support to promote both short-term satisfaction and long-term educational success.

Table 5

Significant relationship between the CEDAR's effectiveness and the student's level of satisfaction

		Platform	Learning experience & Academic support	Convenience & Usability	Engagement & Recommendation	Confidence & Motivation
Knowledge Retention	Pearson's r	0.136	0.018	-0.019	0.110	0.041
	p-value	0.174	0.855	0.849	0.272	0.682
Comprehension	Pearson's r	0.027	0.083	0.112	-0.020	0.033
	p-value	0.787	0.408	0.260	0.838	0.744
Exam Preparedness	Pearson's r	0.308**	0.145	0.155	0.153	0.237*
	p-value	0.002	0.146	0.119	0.126	0.016

*Probability Value Scale: *** $p < 0.001$ = Very Highly Significant; ** $p < 0.01$ = Highly Significant; * $p < 0.05$ = Significant*

Predictor of students' level of satisfaction in CEDAR

Table 6 shows the results of a simple linear regression analysis examining the relationship between exam preparedness and students' satisfaction with the CEDAR platform. The model reveals that exam preparedness is a significant predictor of satisfaction, with a beta coefficient (β) of 0.19 (SE = 0.06), $t(df) = 3.01$, $p = .003$. This regression model accounts for 8% of the variance in student satisfaction ($R^2 = 0.08$), and the overall regression is statistically significant ($F = 9.07$, $p = 0.003$). The derived regression equation is: Satisfaction = $3.70 + 0.19 \times$ Exam Preparedness.

This analysis suggests that students who feel more prepared for exams while using

CEDAR are more likely to report higher satisfaction with the platform. The significant beta coefficient shows a positive linear relationship. Each unit increase in perceived exam preparedness predicts a 0.19-point increase in satisfaction. The R^2 value of 0.08 indicates that exam preparedness accounts for a relatively small portion of the variance. However, it still serves as an important predictor, especially in educational settings where many factors can affect satisfaction.

Recent literature supports the idea that exam preparedness is a key factor in student satisfaction in digital learning environments. In a study by Nguyen et al., (2023), learners who used assessment-focused platforms reported significantly higher satisfaction. This was mainly because exam-oriented tools help reduce performance anxiety and build academic confidence. Their research highlighted the psychological comfort that comes from being prepared for tests, leading to greater overall satisfaction with the platform.

Similarly, Rahman and Malik (2021) found that exam preparedness serves as a motivational anchor in self-directed learning environments. Their findings showed that students value practical outcomes, such as improved exam scores and increased confidence during tests. When platforms successfully support these outcomes, satisfaction levels increase, even if other educational aspects, like long-term understanding, are not the primary focus.

These findings underscore the importance of integrating robust assessment preparation tools into platforms like CEDAR. To boost student satisfaction, developers and educators should enhance features related to exam performance, including mock tests, adaptive quizzes, and personalized feedback. While the model explains only part of the satisfaction variability, the significant role of exam preparedness shows that a learner-centered, results-

driven design is vital in e-learning. Future research could include additional predictors, such as interactivity, peer collaboration, and content clarity, to develop a more comprehensive model of satisfaction.

Table 6

Predictor of students' level of satisfaction in CEDAR

Predictors	Coef (β)	SE Coef	t- value	p-value
(Constant)	3.70	0.28	13.02	< .001
Exam Preparedness	0.19	0.06	3.01	0.003
r²	0.08			
F value	9.07			
p-value	0.003			

Satisfaction = 3.70 + 0.19 Exam Preparedness

SUMMARY, FINDINGS, CONCLUSION, AND RECOMMENDATIONS

Summary

This study examined the usability, effectiveness, and satisfaction of the College of Education Automated Review (CEDAR) platform for students. It was conducted at a higher education institution in Ozamiz City, Misamis Occidental, involving 139 students from the second, third, and fourth years of the College of Education selected using stratified random sampling. Specifically, it answered the following questions: (1) What is the level of usability of CEDAR in terms of ease of navigation, accessibility, and system efficiency; (2) What is the level of effectiveness of CEDAR in terms of knowledge retention, comprehension, and examination preparedness; (3) What is the level of satisfaction among students in using CEDAR in terms of platform, learning experience and academic support, convenience and usability, engagement and recommendation, and confidence and motivation; (4) Is there a significant relationship between the CEDAR's level of usability and the student's level of satisfaction; (5) Is there a significant relationship between CEDAR's effectiveness and the students' level of satisfaction; (6) What factors predict how satisfied students will be when using CEDAR.

A descriptive-correlational research design was used in this study. Researchers employed standardized survey tools, approved by field experts, to gather quantitative data. Descriptive statistics, including mean and standard deviation, helped interpret usability, effectiveness, and satisfaction levels. The Pearson product-moment correlation coefficient and linear regression analysis were used to test relationships and identify predictors.

Findings

After collecting and reviewing the data, the following results were found:

1. The usability of the CEDAR platform was rated very high.
2. The effectiveness of CEDAR also received a very high rating.
3. Student satisfaction with the platform was reported to be very high.
4. The researchers found a statistically significant relationship between system efficiency and both learning experience and academic support, as well as confidence and motivation.
5. In terms of effectiveness, only exam preparedness showed strong links with satisfaction-related variables, specifically platform satisfaction, confidence, and motivation. In contrast, knowledge retention and comprehension did not show any significant connections with satisfaction outcomes.
6. Exam preparedness was the only significant predictor of student satisfaction in the regression analysis, explaining a modest but meaningful portion of the variance.

Conclusion

Based on the findings of this study, the following conclusions were formulated:

1. Students view the CEDAR platform as highly usable, especially regarding system efficiency and accessibility. These factors significantly improve the digital learning experience.
2. The platform effectively supports academic development. It helps students with knowledge retention, understanding, and test preparation.
3. Students report very high satisfaction with CEDAR, showing that it meets their academic needs, increases engagement, and creates a positive learning environment.

4. Usability features, particularly system efficiency and accessibility, are closely linked to higher student satisfaction. This indicates that technical performance and ease of access contribute to a more effective learning experience.

5. Exam preparedness is crucial in shaping students' satisfaction with the platform. This highlights the importance of features that support test readiness and yield measurable academic results.

6. Among all variables examined, exam preparedness stands out as the strongest predictor of student satisfaction. This highlights the importance of digital review platforms in focusing on academic goals, aligning assessments, and enhancing learner confidence.

Recommendations

1. Developers and administrators may enhance exam-oriented features by integrating mock tests, adaptive quizzes, and automated feedback, enabling students to strengthen their exam preparedness.

2. Platform administrators may improve system efficiency by maintaining fast load times, stable operations, and responsive performance across devices, ensuring smooth and reliable student use.

3. The CEDAR platform can be made more accessible through cross-device compatibility and inclusive design, allowing students with varying needs and resources to engage fully.

4. Users can be provided with comprehensive training and orientation through workshops, tutorials, and guides, helping them navigate the platform effectively and utilize its features.

5. Developers and administrators may establish a structured feedback system that

collects and analyzes student input, guiding continuous improvement of the platform.

6. Future researchers may explore additional factors such as peer interaction, instructor support, and curriculum alignment to deepen the understanding of student satisfaction and learning effectiveness.

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**SURVEY QUESTIONNAIRE ON USABILITY, EFFECTIVENESS, AND
SATISFACTION OF STUDENTS IN USING COLLEGE OF EDUCATION
AUTOMATED REVIEW (CEDAR)**

Name (Optional): _____

Course & Year: _____

Major: _____

Date: _____

Introduction

Dear Participant,

You are invited to participate in this research study, which aims to evaluate the usability, effectiveness, and satisfaction of students using the **College of Education Automated Review (CEDAR) platform**. Your responses will remain confidential and will be used solely for academic research.

Please respond to the statements below based on your personal experience using the platform.

Instructions:

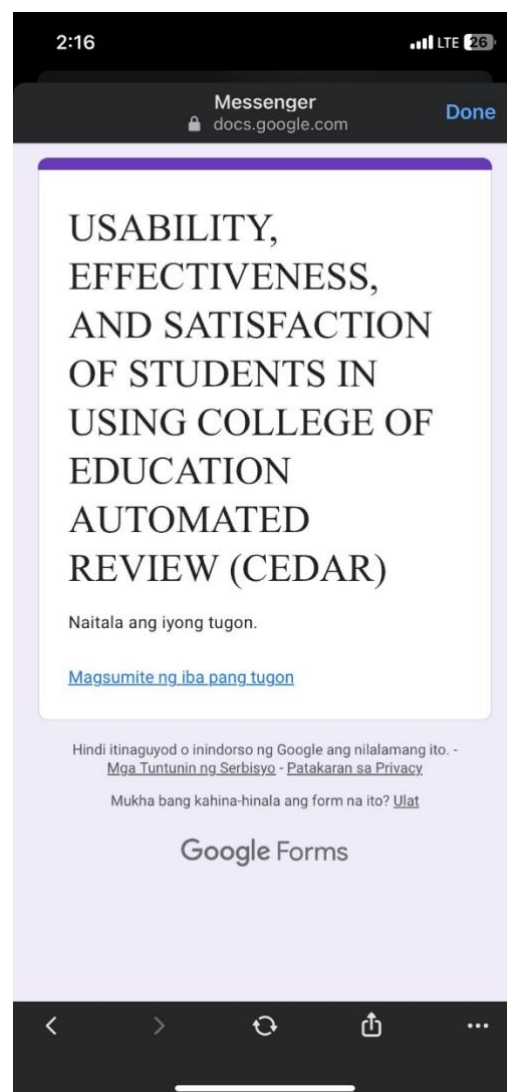
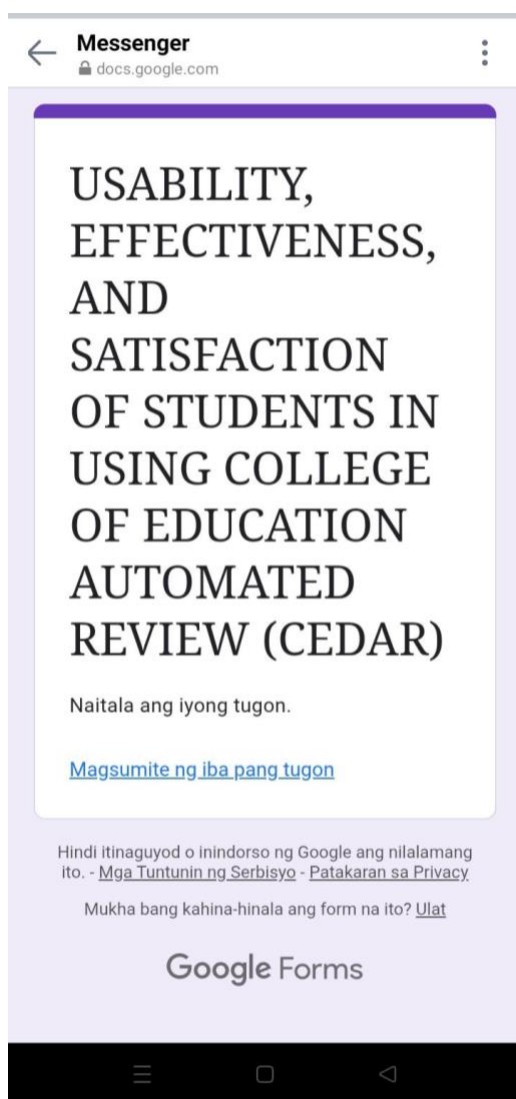
For each statement, please indicate your level of agreement using the following scale:

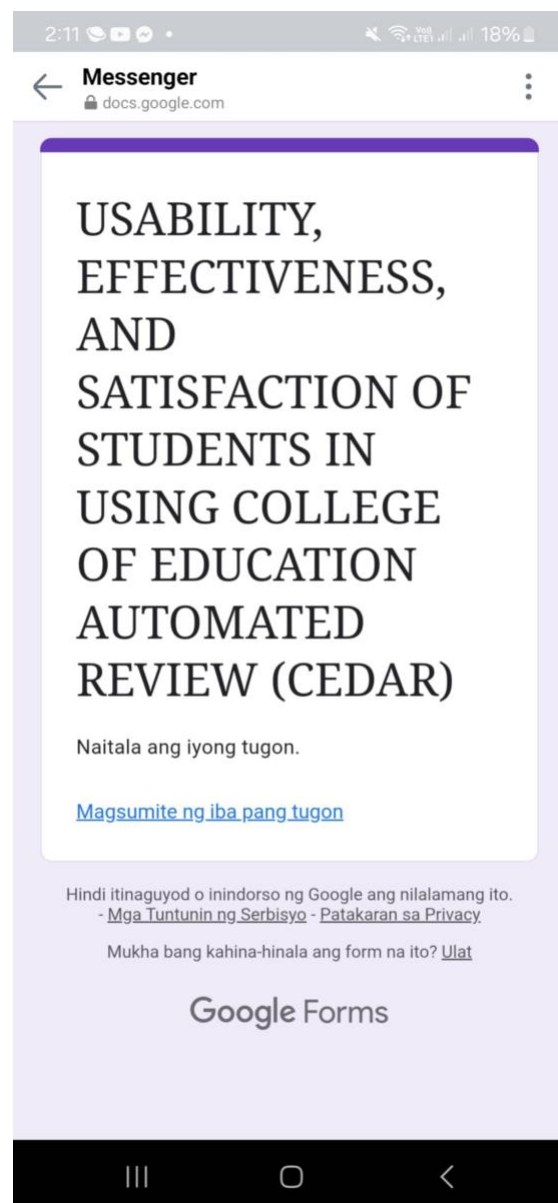
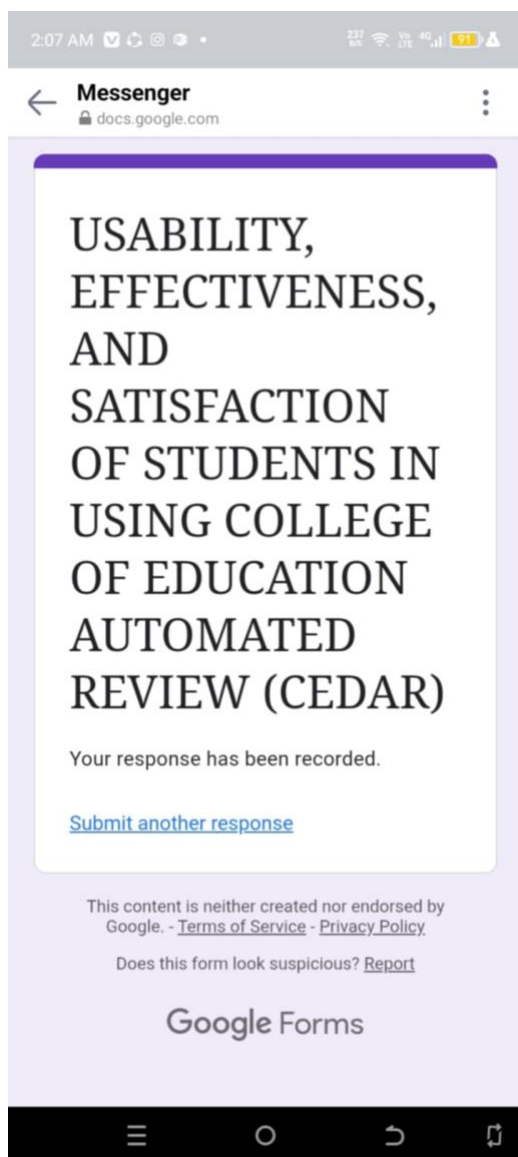
5 – Strongly Agree | 4 – Agree | 3 – Neutral | 2 – Disagree | 1 – Strongly Disagree

A. Usability of the CEDAR Platform	5	4	3	2	1
1. I can easily navigate the platform to find study materials.					
2. The menu and layout of the platform are intuitive and user-friendly.					
3. The platform allows for a smooth transition between different sections (e.g., quizzes, notes, and review materials).					
4. I can access the platform seamlessly across different devices (e.g., laptop, tablet, mobile phone).					
5. The platform's accessibility features accommodate different learning needs.					
6. The platform loads quickly, minimizing waiting times.					
7. System errors and technical issues are minimal while using the platform.					
8. The platform provides clear instructions and guidance for first-time users.					
9. The search function helps me quickly locate specific topics and materials.					
10. The platform's interface is visually appealing and does not cause strain during extended use.					
11. I feel confident using the platform without requiring external assistance.					
12. The platform effectively organizes review materials for easy comprehension.					
13. I receive system updates and notifications that enhance my user experience.					
14. The platform supports interactive elements that enhance usability (e.g., progress tracking, bookmarks).					
15. Overall, I find the CEDAR platform highly usable and efficient.					

B. Effectiveness of the CEDAR Platform	5	4	3	2	1
16. The platform helps me retain key concepts for a longer period.					
17. The review materials are well-structured and logically sequenced.					
18. I understand complex topics more easily using the platform's interactive features.					
19. The quizzes and self-assessments help reinforce my learning.					
20. The platform allows me to track my progress and identify areas for improvement.					
21. The explanations provided for review questions enhance my comprehension.					
22. The platform provides diverse learning materials that cater to different learning styles.					
23. I feel more prepared for exams after using the CEDAR platform.					
24. The interactive exercises increase my engagement with the review materials.					
25. The platform provides sufficient practice tests that simulate real exams.					
26. The learning experience on CEDAR is comparable to or better than traditional review methods.					
27. The platform has improved my confidence in taking assessments and exams.					
28. The platform enhances my ability to recall information during exams.					
29. Using CEDAR regularly has helped me develop effective exam strategies.					
30. Overall, I find the CEDAR platform an effective tool for learning and exam preparation.					

C. Student Satisfaction with the CEDAR Platform	5	4	3	2	1
31. I am satisfied with my overall experience using the CEDAR platform.					
32. The platform meets my expectations as an effective review tool.					
33. I enjoy using the platform for my academic review sessions.					
34. The platform makes my study process more convenient and efficient.					
35. The platform encourages me to engage in self-directed learning.					
36. I would recommend the CEDAR platform to my classmates and peers.					
37. I feel comfortable using the platform for extended study sessions.					
38. The platform minimizes distractions and enhances my focus.					
39. The platform significantly contributes to my academic success.					
40. I found the review materials to be of high quality and relevant to my coursework.					
41. I feel more confident in my studies after using the platform.					
42. The CEDAR platform offers an enriching and supportive learning experience.					
43. I plan to continue using the platform for future review sessions.					
44. Overall, I am highly satisfied with the CEDAR platform.					
45. Using the CEDAR platform motivates me to study more consistently and confidently.					





INFORMED CONSENT FORM

1. I volunteer to participate in the research undertaken by Maxene I. Lago from the College of Education, Misamis University. I understand that the research is designed to evaluate the usability, effectiveness, and student satisfaction with the College of Education Automated Review (CEDAR) platform.

I will be one of the participants surveyed for this research.

2. My participation in this research is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty. If I decline to participate or withdraw from the study, no one will be told.

3. This research will involve my participation. I understand that most questions will find the discussion interesting and thought-provoking. If, however, I feel uncomfortable in any way during the survey session, I have the right to decline to answer any question or to end the survey.

4. The survey will last approximately 5-10 minutes.

5. I understand that the information to be gathered will be treated with confidentiality. I will not be identified in the paper. Only the researchers and their adviser will have access to the research data.

6. I understand that this research has been reviewed and approved by the DSAS Head of Misamis University.

7. I have read and understood the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

8. I have been given a copy of this consent form.

Participant's Signature

Date

For further information, please contact:

Maxene I. Lago (09451635739/lagomaxene61@gmail.com)

UCP

Scale Reliability Statistics

Cronbach's α	
scale	0.889

ECP

Scale Reliability Statistics

Cronbach's α	
scale	0.877

Note. item 'ECP13' correlates negatively with the total scale and probably should be reversed

SSCP

Scale Reliability Statistics

Cronbach's α	
scale	0.731

Note. item 'SSCP8' correlates negatively with the total scale and probably should be reversed

Table 1

Descriptives

	Mean	SD
Ease of Navigation	4.24	0.33
Accessibility	4.37	0.38
System Efficiency	4.42	0.41
Overall level of Usability	4.34	0.37

Scale: 4.20-5.0 (Very High); 3.40-4.19(Moderately High); 2.60-3.39 (High); 1.80-2.59(Low); 1.0-1.79 (Very Low)

Table 2

Descriptives

	Mean	SD
knowledge Retention	4.47	0.465
Comprehension	4.43	0.380
exam preparedness	4.46	0.425
Overall effectiveness	4.53	0.42

Scale: 4.20-5.0 (Very Effectiveness); 3.40-4.19(Moderately Effective); 2.60-3.39 (Effective); 1.80-2.59(Less Effective); 1.0-1.79 (Least Effectiveness)

Table 3

level of satisfaction among students in using CEDAR

Descriptives

	Mean	SD
Learning experience &Academic support	4.58	0.328
convenience & Usability	4.47	0.379
engagement & Recommendation	4.51	0.337
confidence & motivation	4.60	0.491
Overall level of Satisfaction	4.34	0.38

Scale: 4.20-5.0 (Very High); 3.40-4.19 (Moderately High); 2.60-3.39 (High); 1.80-2.59 (Low); 1.0-1.79 (Very Low)

Table 4

Significant relationship between the CEDAR's level of usability and the student's level of satisfaction

Variables		platform	Learning experience & Academic support	convenience & Usability	engagement & Recommendation	confidence & motivation
Ease of Navigation	<i>r</i>	0.046	0.101			
	<i>p</i>	0.648	0.313			
Accessibility	<i>r</i>	-0.006	0.212*			
	<i>p</i>	0.951	0.033			
System Efficiency	<i>r</i>	0.125	0.256**			
	<i>p</i>	0.211	0.010			

Probability Value Scale: *** $p < 0.01$ (Very Highly Significant); ** $p < 0.01$ (Highly Significant); * $p < 0.05$ (Significant)

		platform	Learning experience & Academic support	convenience & Usability	engagement & Recommendation	confidence & motivation
Ease of Navigation	Pearson's <i>r</i>	0.046	0.101	0.085	-0.013	0.054
	<i>p</i> -value	0.648	0.313	0.397	0.895	0.587
Accessibility	Pearson's <i>r</i>	-0.006	0.212 *	0.193	-0.039	0.119
	<i>p</i> -value	0.951	0.033	0.052	0.700	0.232
System Efficiency	Pearson's <i>r</i>	0.125	0.256 **	0.143	-0.023	0.253 *
	<i>p</i> -value	0.211	0.010	0.153	0.818	0.010

Table 5

		platform	Learning experience &Academic support	convenience & Usability	engagement & Recommendation	confidence & motivation
knowledge Retention	Pearson's r	0.136	0.018	-0.019	0.110	0.041
	p-value	0.174	0.855	0.849	0.272	0.682
Comprehension	Pearson's r	0.027	0.083	0.112	-0.020	0.033
	p-value	0.787	0.408	0.260	0.838	0.744
exam preparedness	Pearson's r	0.308 *	0.145	0.155	0.153	0.237 *
	p-value	0.002	0.146	0.119	0.126	0.016

Table 6

Predictors of of student's level of satisfaction in CEDAR

Predictors	Coef (β)	SE Coef	t- value	p-value
(Constant)	3.70	0.28	13.02	< .001
Exam Preparedness	0.19	0.06	3.01	0.003
r ²	0.08			
F value	9.07			
p-value	0.003			
Satisfaction=3.70 +0.19* Exam Preparedness				

CURRICULUM VITAE

PERSONAL DATA

Name : Maxene I. Lago

Address : P-malinawon, Tinago, Ozamiz City,
Misamis Occidental

Date of Birth : December 29, 2002

Place of Birth : Ozamiz City, Misamis Occidental

Sex : Female

Civil Status : Single

Parents : Mr. & Mrs. Maximo A. Lago



EDUCATION

College : Bachelor of Secondary Education Major in English
Misamis University
Ozamiz City, Misamis Occidental

Secondary : Senior High School
Misamis University
Ozamiz City, Misamis Occidental
2019-2021

Junior High School
Ozamiz City National High School
Ozamiz City, Misamis Occidental
2014-2018

Elementary : Ozamiz City Central School
Ozamiz City, Misamis Occidental
2008-2014